

Amendments to the Claims

The Claim listing below will replace all prior versions of the Claims in the application.

Claim Listing

1. (currently amended) A method of communicating load, comprising:
 - determining a load on a first node;
 - factoring the load into a session initiation protocol (SIP) Q-value for the first node, where the Q-value is an integer value based on both (1) a contact priority and (2) a number of calls or an amount of information being processed for a call;
 - transmitting the Q-value to a second node via one or more load brokers where each load broker is a back-to-back user agent that is to operate as a proxy and to communicate regarding node locations in a SIP network; and
 - determining a domain load factor for a domain that comprises a plurality of SIP entities, the domain load factor indicating domain load for the entire domain, the domain load factor to be shared with other domains and to be used with the Q-value to determine call routing.
2. (Original) The method of claim 1, further comprising the first node subscribing to a load factor exchange service in a message transmitted to the second node.
3. (Original) The method of claim 2, further comprising the second node confirming receipt of the subscription in a message transmitted to the first node.
4. (Original) The method of claim 1, further comprising:
 - a third node requesting the Q-value for the first node from the second node; and
 - the second node transmitting the Q-value for the first node to the third node.
5. (Original) The method of claim 4, wherein the second node also transmits Q-values for a plurality of alternate nodes to the third node.

6. (Original) The method of claim 5, further comprising the third node utilizing the one of the first node and the alternate nodes having the lowest Q-value as an intermediate node.

7. (currently amended) ~~A~~ ~~An article of manufacture, comprising:~~

~~a computer readable memory storing instructions that medium having stored thereon instructions which,~~ when executed by a processor, cause the processor to:

determine a load on a first node;

factor the load into a session initiation protocol (SIP) Q-value for the first node, where the Q-value is an integer value based on both (1) a contact priority and (2) a number of calls or an amount of information being processed for a call;

transmit the Q-value to a second node via one or more load brokers where each load broker is a back-to-back user agent that is to operate as a proxy and to communicate regarding node locations in a SIP network; and

determine a domain load factor for a domain that comprises a plurality of SIP entities, the domain load factor indicating domain load for the entire domain, the domain load factor to be shared with other domains and to be used with the Q-value to determine call routing.

8. (currently amended) The ~~article of manufacture~~ computer readable memory of claim 7, wherein the instructions are to cause the processor to direct a transmitting node to transmit load information for the first node and for the second node in the session initiation protocol Q-value.

9. (currently amended) The ~~article of manufacture~~ computer readable memory of claim 8, wherein the transmitting node is to transmit the information to the least loaded of the first node and the second node.

10. (currently amended) The ~~article of manufacture~~ computer readable memory of claim 7, wherein the instructions are to cause the information to be redirected from the first node to the second node when the second node becomes less loaded than the first node.

11. (currently amended) The ~~article of manufacture~~ computer readable memory of claim 7, wherein load is based on at least one metric including call capacity of the first and second nodes, processing capability of the first and second nodes, network bandwidth at the first and second nodes, and network availability of the first and second nodes.
12. (currently amended) The ~~article of manufacture~~ computer readable memory of claim 11, wherein the metrics of the first and second nodes are weighted based on the capacity of the nodes for that metric.
13. (currently amended) The ~~article of manufacture~~ computer readable memory of claim 7, wherein the instructions are further to cause the processor to receive a subscription from the transmitting node and at least one second transmitting node, and wherein the load information for at least one of the first node and the second node is caused to be transmitted to subscribing nodes upon request.
14. (currently amended) A session initiation protocol device, comprising:
- a network adaptor coupled to a network;
 - a session initiation protocol load module to receive session initiation protocol load information from session initiation protocol entities on the network through the network adaptor, wherein the load information is factored into a session initiation protocol Q-value, where the Q-value is an integer value based on both (1) a contact priority and (2) a number of calls or an amount of information being processed for a call, the Q-value to be transmitted via one or more load brokers where each load broker is a back-to-back user agent that is to operate as a proxy and to communicate regarding node locations in a SIP network; and
 - a calculation module to provide load information for at least one of the session initiation protocol entities to a querying entity through the network adaptor;
- the Q-value and a domain load factor both to be used to determine call routing, the domain load factor being determined for a domain that comprises a plurality of session initiation protocol entities, the domain load factor indicating domain load for the entire domain, the domain load factor to be shared with other domains.

15. (Original) The session initiation protocol device of claim 14, wherein the calculation module is furthermore to provide loads for a plurality of session initiation protocol entities to the querying entity.

16. (Original) The session initiation protocol device of claim 14, wherein the load information for the session initiation protocol entities is based on at least one metric including call capacity, processing capability, network bandwidth, and network availability.

17. (Previously Presented) The session initiation protocol device of claim 14, wherein the metrics of the entities are weighted based on their capacity for that metric.

18. (Previously Presented) The session initiation protocol device of claim 14, wherein the load of the session initiation protocol entity is transmitted to the querying entity as a factor in a Q-value.

19. (currently amended) A location service, comprising:

a data storage device to contain a cross reference to session initiation protocol entities coupled to a network and a load factor associated with session initiation protocol entities;
a network adaptor coupled to the network;
a processor coupled to the data storage device and the network adaptor; and
a computer readable medium having stored thereon instructions which, when executed by the processor, cause the processor to:

determine a load on a first node;

factor the load into a session initiation protocol Q-value for the first node, where the Q-value is an integer value based on both (1) a contact priority and (2) a number of calls or an amount of information being processed for a call;

transmit the Q-value to a second node via one or more load brokers where each load broker is a back-to-back user agent that is to operate as a proxy and to communicate regarding node locations in a SIP network; and

determine a domain load factor for a domain that comprises a respective plurality of session initiation protocol entities, the domain load factor indicating domain load for the entire domain, the domain load factor to be shared with other domains and to be used with the Q-value to determine call routing.

20. (Previously Presented) The location service of claim 19, wherein the processor is to retrieve a respective load factor associated with at least one of the session initiation protocol entities when requested to do so by a requesting session initiation protocol entity and transmit that load information to the requesting session initiation protocol entity through the network adaptor.

21. (Previously Presented) The location service of claim 20, wherein the respective load factor is transmitted as a factor in a Q-value.

Claims 22-24 (cancelled).